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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,125	11/19/2003	Paul E. Jacobs	040101	9099
23596 7590 04/14/2008 QUALCOMM INCORPORATED 5775 MOREHOUSE DR. SAN DIEGO, CA 92121				
EXAMINER				
DINH, DUC Q				
ART UNIT		PAPER NUMBER		
2629				
NOTIFICATION DATE		DELIVERY MODE		
04/14/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/718,125

Applicant(s)

JACOBS ET AL.

Examiner

Duc Q. Dinh

Art Unit

2629

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 and 16-35 is/are pending in the application.
- 4a) Of the above claim(s) 16-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14, 26-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/08)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

1. This Office Action is responsive to the Applicant's Amendment filed on January 10, 2008. Claims 1, 8, 9, 11, 13 and 14 are amended, claim 15 is cancelled, claims 26-35 are newly added and claims 16-25 are withdrawn from consideration.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2, 5-14 and 26-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Chuang (US 20040207604) in view of Enger et al. (US 20050020325), hereinafter Enger.

In reference to claim 1, Chuang discloses an apparatus in Fig. 4 comprising:

a display (5) for presenting information to a user;

a housing (2) connected to the display for supporting the display; and

a keyboard assembly (31,32) connected through a sliding connection to the housing, the keyboard assembly deployable in multiple directions, wherein the information presented to the user through the display is oriented based on a direction of deployment of the keyboard (paragraph [0019])

Accordingly, Chuan discloses everything except the deployed keyboard is a touch sensitive screen keyboard. Enger discloses an apparatus having an input device comprising a touch sensitive keyboard (see Figs. 1-2, paragraphs [0043 and 0052]).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify the keyboard assembly to have a touch screen keyboard in the device of Chuang as taught by Enger for providing a portable electronic device that integrates the functionality for multiple independent devices into a single portable device, while having an ergonomic user interface (see paragraph [0016])

In reference to claim 2, Chuang discloses the keyboard (12 and 13) is deployed in first direction (Fig. 4) and a second direction as claimed.

In reference to claim 5, Chuang discloses the device is operable in a wireless environment [0007]

In reference to claim 6, Chuang discloses wherein the sliding connection is a track and carrier type of connection (paragraph [0007]).

In reference to claim 7, Chuang discloses the display is a touch sensitive screen [0018]

In reference to claims 8-10, see the rejection as applied to claim 1. In addition, Chuang discloses the when the user uses the keyboard in first display mode for the first orientation and in second orientation transverse to the first orientation, the software to enable the operation of the display according to the appropriate orientation of the keyboard in either directions as shown in Fig. 1-3.

In reference to claim 11, Chuang discloses an apparatus comprising:

- a display (5) for presenting information to a user;

- a housing (2) connected to the display for supporting the display;

- and a keyboard assembly connected through a sliding connection to the housing, the keyboard assembly deployable in multiple directions (Fig. 4).

Accordingly, Chuan discloses everything except the deployed keyboard is a touch sensitive screen keyboard. Enger discloses an apparatus having an input device comprising a touch sensitive keyboard (see Figs. 1-2, paragraphs [0043 and 0052]).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify the keyboard assembly to have a touch screen keyboard in the device of Chuang as taught by Enger for providing a portable electronic device that integrates the functionality for multiple independent devices into a single portable device, while having an ergonomic user interface (see paragraph [0016])

In reference to claim 12, Chuang discloses a first set of key arrangement, when deployed in a first direction, and provides a second set of key arrangement, when deployed in a second direction (see Fig. 4).

In reference to claims 13-14, refer to the rejections as applied to claims 1-2 and 5-10 above.

Enger discloses a Hall effect sensor (302,304,306,308) for a electronic device operates in multiple directions as claimed and a touch screen keyboard as shown in Fig. 6 and paragraph [0052-0054]

It would have been obvious for one of ordinary skill in the art at the time of the invention to use the Hall-effect sensor direction in the device of Chuang taught by Enger to detect the portrait or landscape mode for the display system.

4. Claims 1-6, 8-14 and 26-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Jellicoe (U.S Patent No. 7,107,018) in view of Enger et al. (US 20050020325).

In reference to claim 1, Jellicoe discloses in Figs. 2 and 3 an apparatus comprising:
a display (22) for presenting information to a user;
a housing (12) connected to the display for supporting the display;
and a keyboard assembly(14 and 16) connected through a sliding connection to the housing, the keyboard assembly deployable in multiple directions, wherein the information presented to the user through the display is oriented based on a direction of deployment of the keyboard assembly (col. 3, lines 6-20).

Accordingly, Chuan discloses everything except the deployed keyboard is a touch sensitive screen keyboard. Enger discloses an apparatus having an input device comprising a touch sensitive keyboard (see Figs. 1-2, paragraphs [0043 and 0052]).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify the keyboard assembly to have a touch screen keyboard in the device of Chuang as taught by Enger for providing a portable electronic device that integrates the functionality for multiple independent devices into a single portable device, while having an ergonomic user interface (see paragraph [0016])

In reference to claim 2, Jellicoe discloses the apparatus of claim 1, wherein the keyboard assembly is deployable e in a first direction and a second direction (Figs 2 and 3).

In reference to claim 3, Jellicoe discloses first keyboard deployment direction presents a QWERTY key arrangement and the second keyboard deployment direction presents a phone style key arrangement (col. 3, lines 21-30).

In reference to claims 4-5, Jellicoe discloses the device is operable as a PDA and a phone, a wireless environment (col. 2, lines 46-48).

In reference to claim 6, Jellicoe discloses the sliding connection is a track and carrier type of connection (see Fig. 1-3)

In reference to claim 8, Jellicoe discloses a method for presenting information on a display to a user of a device, the device having a keyboard deployable through a sliding connection, the keyboard deployable in multiple directions, the method comprising:

detecting a direction in which the keyboard assembly is deployed;

and orienting information presented on the display with reference to a direction of deployment of the keyboard assembly (col. 3, lines 5-20).

Accordingly, Chuan discloses everything except the deployed keyboard is a touch sensitive screen keyboard. Enger discloses an apparatus having an input device comprising a touch sensitive keyboard (see Figs. 1-2, paragraphs [0043 and 0052]).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify the keyboard assembly to have a touch screen keyboard in the device of Chuang as taught by Enger for providing a portable electronic device that integrates the functionality for multiple independent devices into a single portable device, while having an ergonomic user interface (see paragraph [0016]).

In reference to claims 9-10, Jellicoe discloses the orienting information presented on the display with reference to input by the user, i.e. when the user use the keyboard to input information to the device, or an input from an application resident on the device (col. 3, lines 6-20).

In reference to claim 11, Jellicoe discloses an apparatus comprising:
a display for presenting information to a user;
a housing connected to the display for supporting the display; and
a keyboard assembly connected through a sliding connection to the housing, the keyboard assembly deployable in multiple directions. (see rejection of claim 1)

Accordingly, Jellicoe discloses everything except the deployed keyboard is a touch sensitive screen keyboard. Enger discloses an apparatus having an input device comprising a touch sensitive keyboard (see Figs. 1-2, paragraphs [0043 and 0052]).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify the keyboard assembly to have a touch screen keyboard in the device of Chuang as taught by Enger for providing a portable electronic device that integrates the functionality for multiple independent devices into a single portable device, while having an ergonomic user interface (see paragraph [0016])

In reference to claim 12, Jellicoe discloses the keyboard assembly provides a first set of key arrangement when deployed in a first directions, and provides a second set of key arrangement, when: deployed in: a second direction (see rejection of claim 2).

In reference to claim 13, Jellicoe discloses an apparatus for presenting information on a display to a user of a device, the device having a keyboard assembly deployable through sliding connection; the keyboard assembly deployable in multiple directions comprising:

means for detecting a direction in which the keyboard assembly is deployed; and
means for orienting information presented on the display with reference to the direction of deployment of the keyboard assembly (see rejection of claim 8).

Accordingly, Chuan discloses everything except the deployed keyboard is a touch sensitive screen keyboard. Enger discloses an apparatus having an input device comprising a touch sensitive keyboard (see Figs. 1-2, paragraphs [0043 and 0052]).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify the keyboard assembly to have a touch screen keyboard in the device of Chuang as taught by Enger for providing a portable electronic device that integrates the functionality for multiple independent devices into a single portable device, while having an ergonomic user interface (see paragraph [0016])

In reference to claim 14, Jellicoe discloses at least one processor for presenting information on a display to a user of a device, the device having a keyboard assembly deployable through a sliding connection, the keyboard assembly: deployable in multiple directions, comprising:

means for detecting a direction in which the keyboard assembly is deployed; and

means for orienting information presented on the display with reference to the direction of deployment of the keyboard assembly (see rejection of claim 8).

Accordingly, Chuan discloses everything except the deployed keyboard is a touch sensitive screen keyboard. Enger discloses an apparatus having an input device comprising a touch sensitive keyboard (see Figs. 1-2, paragraphs [0043 and 0052]).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify the keyboard assembly to have a touch screen keyboard in the device of Chuang as taught by Enger for providing a portable electronic device that integrates the functionality for

multiple independent devices into a single portable device, while having an ergonomic user interface (see paragraph [0016])

In reference to claims 26-35, Enger discloses a Hall effect sensor (302,304,306,308 of Fig. 1) for a electronic device operates in multiple directions as *claimed and using a touch display screen keyboard as claimed (see Fig. 6, and paragraph [0052-0055].*

It would have been obvious for one of ordinary skill in the art at the time of the invention to use the Hall effect sensor direction in the combination of Jellicoe taught by Enger to detect the portrait or landscape mode for the display system.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jellicoe and Enger in view of Pihlaja (U.S Patent No. 7,009,599).

In reference to claim 7, the combination of Jellicoe and Enger does not disclose the display is a touch sensitive screen. Pihlaja discloses a mobile phone device (Fig. 5) having a display device (103) is a touch sensitive screen for soft buttons 501.

It would have been obvious for one of ordinary skill in the art at the time of the invention to provide the touch sensitive screen in combination of Jellicoe and Enger as taught by Pihlaja because it would provide more control functions for the hand-held device by using soft keys (501) in the display device.

Response to Arguments

6. Applicant's arguments with respect to the rejected claims have been considered but are moot in view of the new ground(s) of rejection.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc Q. Dinh whose telephone number is (571) 272-7686. The examiner can normally be reached on Mon-Fri from 8:00.AM-4:00.PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe can be reached on (571) 272-7691. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Duc Q Dinh/

Primary Examiner, Art Unit 2629